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G.654.D

Z-PLUS Fiber™ 150

Advanced Pure Silica Core Single Mode Optical Fiber







- World's lowest attenuation of 0.144 dB/km or 0.150 dB/km, and very large effective area of 150 µm² typical
- For transoceanic (6,000 12,000 km) systems

General

Effective Area			
Typical effective area at 1550 nm	150 μm²		
Attenuation			
Typical attenuation	LL: 0.150 dB/km		
at 1550 nm	ULL: 0.144 dB/km		
Core Glass			
	Pure Silica		

Optical Characteristics

Individual fiber PMD *2)

Attenuation						
Attenuation at 1550 nm	LL: $\leq 0.158 \text{ dB/km}$					
(Individual)	ULL: $\leq 0.152 \text{ dB/km}$					
Attenuation at 1550 nm (Average in total quantity) *1)	LL: 0.150 ± 0.003 dB/km					
	ULL: 0.144 ± 0.003 dB/km					
Point discontinuity at 1550 nm	≤ 0.05 dB					
Effective Area						
Effective area at 1550 nm	$150 \pm 15 \mu m^2$					
Chromatic Dispersion						
Chromatic dispersion at 1550nm	≤ 23 ps/nm/km					
Chromatic dispersion slope at 1550nm	≤ 0.070 ps/nm ² /km					
Cable Cutoff Wavelength (λcc)						
λсс	≤ 1530 nm					
Polarization Mode Dispersion (PMD)						

Geometrical Characteristics

\leq 0.8 μm		
$125.0 \pm 1.0 \ \mu m$		
≤ 2.0 %		
$245 \pm 10 \ \mu m$		
$250 \pm 15 \mu m$		
≤ 12 µm		

Mechanical Characteristics

Lenuation		D of To a	L			
enuation at 1550 nm Individual)	LL: $\leq 0.158 \text{ dB/km}$ ULL: $\leq 0.152 \text{ dB/km}$		Proof Test Proof stress level		2.0% (200 kpsi = 1.43 GPa)	
enuation at 1550 nm Average in total quantity) *1)	LL: 0.150 ± 0.003 dB/km	Macrober	nding Loss			
	ULL: 0.144 ± 0.003 dB/km	Bending radius	Number of turns	Wavelength	Induced Attenuation	
nt discontinuity at 1550 nm	≤ 0.05 dB	30 mm	100	1550 nm	\leq 2.0 dB	
		30 mm	100	1625 nm	\leq 2.0 dB	
ective Area						
ective area at 1550 nm	$150 \pm 15 \ \mu m^2$	Packaging				
romatic Dispersion		Delivery I	Length			
romatic dispersion at 1550nm	< 23 ps/nm/km				5 – 100 km	

- *1) Average attenuation will be applied only to a batch with the total quantity of 4,000 km or more.
- *2) Measured on fiber with free tension. PMD values may change when fiber is cabled. This PMD value will be achieved when cabled properly.

This document states a standard specification. Upon request, alternative value offerings will be available.

 \leq 0.1 ps/r-km